

Claims:

1. A method of diagnosing diabetes, the method comprising determining the level or ratio of P- and/or A-type inositolphosphoglycans (IPGs) in a biological sample from a patient.
2. The method of claim 1 wherein the biological sample is a blood or urine sample.
3. The method of claim 1 or claim 2 wherein the level of the P- or A-type IPGs is determined using an assay for one of their biological activities.
4. The method of claim 3 wherein the level of the P-type IPGs is determined in an assay measuring activation of pyruvate dehydrogenase phosphatase by P-type IPGs.
5. The method of claim 3 wherein the level of the A-type IPGs is determined in an assay measuring activation of lipogenesis by A-type IPGs in isolated adipocytes.
6. The method of claim 1 or claim 3 wherein the level of the P- or A-type IPGs is determined using a binding agent capable of specifically binding P- or A-type IPGs.
7. The method of claim 6 wherein the binding agent is an anti-IPG antibody or an IPG specific binding protein.
8. The method of claim 1 or claim 2 wherein the method comprises the steps of:
- (a) contacting a biological sample obtained from the patient with a solid support having immobilised thereon a first binding agent having binding sites specific for one or more P-type IPGs and a second binding agent having binding sites for one or more A-type IPGs;
 - (b) contacting the solid support with one or more

labelled developing agents capable of binding to unoccupied binding sites, bound IPGs or occupied binding sites; and,

5 (c) detecting the label of the developing agents specifically binding in step (b) to obtain values representative of the levels of the P- and A-type IPGs in the sample.

9. The method of claim 8 comprising the further step of:
10 (d) using the values to obtain a ratio of the P- and A-type IPGs in the sample.

10. Use of P- or A-type inositolphosphoglycans (IPGs), or antagonists to P- or A-type IPGs, in the preparation of a medicament for the treatment of diabetes.

15 11. The use of claim 10 wherein the medicament is formulated to provide a ratio of P- and A-type IPGs in a patient having diabetes of from about 4:1 to about 6:1.

20 12. The use of claim 11 wherein the ratio of P- and A-type IPGs is about 6:1 for a male patient and about 4:1 for a female patient.

25 13. Use of a P-type IPG and/or an A-type IPG antagonist in the preparation of a medicament for the treatment of obese type II diabetes.

30 14. Use of a mixture of P-type and A-type IPGs in the preparation of a medicament for the treatment of IDDM or lean type II diabetes (NIDDM).

35 15. The use of claim 14 wherein the P- and A-type IPGs are in the ratio of about 6:1 for male patients and about 4:1 mixture for female patients.

16. A pharmaceutical composition comprising a P-type IPG and/or an A-type IPG antagonist in combination with a

pharmaceutically acceptable carrier.

17. A pharmaceutical composition comprising a mixture of P- and A-type IPGs in combination with a pharmaceutically acceptable carrier.

18. The pharmaceutical composition of claim 17 wherein the P/A-type IPG ratio is from about 4:1 to about 6:1.

19. A method of screening for P- or A-type IPG antagonists, the method comprising:

(a) contacting a candidate antagonist and a P- or A-type IPG in an assay for a biological property of the P- or A-type IPG under conditions in which the IPG and the candidate antagonist can compete;

(b) measuring the biological property of the IPG; and,

(c) selecting candidate antagonists which reduce the biological activity of the IPG.